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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,196	03/17/2004	Frederick J. Rozario	GP-303650	3413
7590 12/19/2005			EXAMINER	
KARL F. BARR JR. General Motors Corporation Legal Staff, Mail Code 482-C23-B21 P.O. Box 300 Detroit, MI 48265-3000			ALI, HYDER	
			ART UNIT	PAPER NUMBER
			3747	
DATE MAILED: 12/19/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/802,196

Applicant(s)

ROZARIO ET AL.

Examiner

HYDER ALI

Art Unit

3747

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2005.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-9 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Inventorship*

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

- 1. Claims 1-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Vorih et al (US 6,510,824).**

As to Claim 1, Vorih et al discloses a system for control of oil pressure in engines having cylinder deactivation hydraulic lifters 300, the system comprising: an oil pump driven by the engine and supplying pressurized oil to an oil gallery for lubricating

Art Unit: 3747

selected engine components and controlling actuation of cylinder deactivation valve lifters 300; an oil pressure control associated with the oil pump and operative to control oil pressure supplied to the oil gallery under normal operating temperatures; and an auxiliary pressure relief valve 714 in the system and operative to maintain oil pressures at high engine speeds and low oil temperatures below a maximum allowable pressure, thereby permitting actuation of the deactivation lifters 300. **See col. 27, lines 45-67.**

As to Claim 2, Vorih et al discloses the auxiliary pressure relief valve 714 is connected with a main oil gallery.

As to Claim 3, Vorih et al discloses the auxiliary pressure relief valve 714 is connected with a valve lifter gallery.

As to Claim 4, Vorih et al discloses engine includes a cylinder block and the auxiliary pressure relief valve 714 is mounted in and connected to a gallery in the cylinder block.

As to Claim 5, Vorih et al discloses the auxiliary pressure relief valve 714 is mounted in a crankcase portion of the cylinder block.

As to Claim 6, Vorih et al discloses a method of extending the operating range of cylinder deactivation valve lifters 300 in an engine oil system during operation of the engine at low oil temperatures and high speeds, the method comprising: supplying pressurized oil to an oil gallery from an engine driven positive displacement oil pump for lubricating selected engine components and controlling actuation of the cylinder deactivation valve lifters; limiting output of the pump by bypassing excess oil to control oil pressure supplied to the oil gallery under normal operating oil temperatures; and

limiting pressure in the system at high engine speeds and low oil temperatures by opening an auxiliary pressure relief valve 714 in the system operative at reduced operating oil temperatures to maintain oil pressures below a maximum allowable pressure, thereby permitting actuation of the deactivation valve lifters 300.

As to Claim 7, Vorih et al discloses mounting the auxiliary pressure relief valve 714 in a portion of the engine containing a main gallery.

As to Claim 8, Vorih et al discloses the auxiliary relief valve 714 is located in the engine crankcase.

As to Claim 9, Vorih et al discloses the auxiliary relief valve 714 is mounted in bore of a crankcase connected with the main gallery.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**2. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vorih et al (US 6,510,824) in view of Albertson et al (US 6,557,518).**

Vorih et al discloses the auxiliary pressure relief valve as described above.

Albertson et al discloses a system for control of oil pressure in engines having cylinder deactivation hydraulic lifters 22,28, the system comprising: an oil pump 34 driven by the engine and supplying pressurized oil to an oil gallery for lubricating selected engine components and controlling actuation of cylinder deactivation valve lifters 22,38; an oil

Art Unit: 3747

pressure control 36 associated with the oil pump 34 and operative to control oil pressure supplied to the oil gallery under normal operating temperatures.

It would have been obvious to a person having ordinary skill in the art to modify Vorih et al by employing an oil pump 34 driven by the engine and supplying pressurized oil to an oil gallery for lubricating selected engine components and controlling actuation of cylinder deactivation valve lifters 22,38; an oil pressure control 36 associated with the oil pump 34 and operative to control oil pressure supplied to the oil gallery under normal operating temperatures as taught by Albertson et al **in order to** provide Vorih et al engine with an oil pump 34 driven by the engine and supplying pressurized oil to an oil gallery for lubricating selected engine components and controlling actuation of cylinder deactivation valve lifters 22,38; an oil pressure control 36 associated with the oil pump 34 and operative to control oil pressure supplied to the oil gallery under normal operating temperatures.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-9 have been considered but are moot in view of the new ground(s) of rejection. Vorih et al discloses an auxiliary pressure relief valve.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HYDER ALI whose telephone number is (571) 272-4836. The examiner can normally be reached on M-F (8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, HENRY YUEN can be reached on (571) 272-4856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hyder A.

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